

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 10/686,522
Attorney Docket No.: Q72552

REMARKS

The Office Action of September 6, 2005 has been received and its contents carefully considered.

Claims 1 to 20 are all the claims pending in the application, prior to the present amendment.

The Examiner sets forth six separate rejections of the claims over cited prior art. The prior art that the Examiner employs in these rejections is the prior art that is listed on the Substitute Form PTO-1449 filed with the Information Disclosure Statement of February 17, 2005.

Applicants set forth below the six rejections of the claims.

- (a) Claims 1 and 4 have been rejected under 35 U.S.C. § 102 (b) as anticipated by JP '195.
- (b) Claims 5 and 14 have been rejected under 35 U.S.C. § 103 (a) as obvious over JP '195.
- (c) Claims 2 and 6-8 have been under 35 U.S.C. §103(a) as obvious over JP '195 and further in view of JP '735.
- (d) Claim 3 has been rejected under 35 U.S.C. § 103(a) as obvious over JP '195 and further in view of JP '819.
- (e) Claims 9, 11/9 and 12 have been rejected under 35 U.S.C. § 103(a) as obvious over JP '195 in view JP '464.

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(f) Claims 10 and 11/10 have been under 35 U.S.C. § 103(a) as obvious over JP '195 in view of JP '735 and in view of JP '464.

Applicants submit that the cited JP '195, JP '735, JP 819 and JP '464 documents do not disclose or render obvious the presently claimed invention and, accordingly, request withdrawal of this rejection.

Applicants have amended claim 1 to incorporate the recitations of claim 7, and have canceled claim 7.

In addition, applicants have amended claim 2 to place it in independent form and to incorporate the recitations of claim 8. Applicants have canceled claim 8.

The present invention as set forth in claim 1 as amended above is directed to a dry grinding system comprising: (a) grinding means for dry-grinding a material to be ground; (b) first classification means for classifying a ground product obtained through the grinding means, into fine powder having a relatively small average particle size and coarse powder having a relatively large average particle size; (c) second classification means for further classifying the coarse powder obtained through the first classification means, into fine powder having a relatively small average particle size and coarse powder having a relatively large average particle size; and (d) returning means for returning to the grinding means the coarse powder obtained through the second classification means.

As set forth in claim 1, the dry grinding system is one in which the second classification means (c) includes the following feature (1):

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(1) the second classification means includes: classification means for further classifying the resultant fine powder into ultrafine powder having a relatively small average particle size and fine powder having a relatively large average particle size; and returning means for returning to the grinding means the ultrafine powder obtained through this classification means.

The dry grinding system of claim 2 contains a third classification means and has the following feature (2):

(2) the third classification means includes: classification means for further classifying the resultant fine powder into ultrafine powder having a relatively small average particle size and fine powder having a relatively large average particle size; and returning means for returning to the grinding means the ultrafine powder obtained through this classification means.

As described at page 29 of the present specification, in Example 2 of the specification, a dry grinding system similar to that of the “second embodiment” was used. As disclosed at page 26, lines 11 to 18 of the specification, the second embodiment includes, if desired, classification means for further classifying the fine powder 81 into ultrafine powder having a relatively small average particle size and fine powder having a relatively large average particle size, and returning means 100 for returning to the grinding means 20 the ultrafine powder and the coarse powder obtained through the third classification means 80.

In Example 2, a sieve having a mesh size of 45 μm was incorporated in the third classification means to remove fine particles see page 30, lines 12 to 14. Therefore, Example 2 is an example of currently amended claim 2.

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As disclosed at page 30, last two lines to page 31, line 1 of the specification, in Example 3, a dry grinding system similar to that of the “first embodiment” was used. As disclosed at page 14, lines 20 to 27, the first embodiment includes, if desired, classification means for further classifying the fine powder 51 into ultrafine powder having a relatively small average particle size and fine powder having a relatively large average particle size, and returning means 70 for returning to the grinding means 20 the ultrafine powder and the coarse powder 52.

In Example 3, a sieve having a mesh size of 53 μm was incorporated in the second classification means to remove fine particles. See page 31, lines 18 to 20. Therefore, Example 3 is an example of currently amended claim 1.

In support of the patentability of the present invention, applicants enclose herewith a copy of an executed Declaration Under 37 C.F.R. § 1.132. Applicants note that the Reference Figs. 1 and 2 of the Declaration contains graph curves that are in color. Applicants also enclose a black-and-white copy of the Reference Figs. 1 and 2. As shown in the Declaration, in accordance with the dry grinding system of currently amended claim 1 or 2, high collection efficiency of a coarse powder product can be realized.

In addition, the Declaration sets forth a discussion of reasons for realizing high collection efficiency of the course powder product..

In contrast to the present invention, JP ‘195, which is the primary reference in each of the six rejections, corresponds to Test Example 2 of the Declaration. Also, in JP ‘195 and the secondary references of JP ‘735, JP ‘829, and JP ‘464 there is no description or suggestion of features (1) and (2) of the present invention and their effects.

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In view of the above, applicants submit that the cited documents do not disclose or render obvious the subject matter of the present claims and accordingly, request withdrawal of each of the six rejections.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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